

AMENDMENTS TO THE CLAIMS

Following is a complete set of claims as amended with this Response. This complete set of claims excludes cancelled claims 14 and 16 and includes amended claims 1, 13, 15, and 18 and new claims 19 and 20.

1. (Currently Amended) For use in an implantable medical device, a biocompatible, biostable, corrosion-resistant wire strand comprising:
a core comprising a plurality of electrically conductive, low electrical resistance filaments embedded in an electrically conductive matrix; and
a low electrical resistance, substantially chemically inactive cladding discrete from the matrix.
2. (Original) The wire strand of claim 1 in which:
the core is substantially devoid of interstices.
3. (Original) The wire strand of claim 2 in which:
the core comprises a drawn filled tube (DFT).
4. (Original) The wire strand of claim 2 in which:
the core comprises a drawn brazed strand (DBS).
5. (Original) The wire strand of claim 1 in which:
the plurality of filaments comprise a material selected from the group consisting of silver, gold and a low electrical resistance conductive polymer.
6. (Original) The wire strand of claim 1 in which:
the matrix comprises a material selected from the group consisting of MP35N, tantalum, titanium and niobium.

7. (Original) The wire strand of claim 1 in which:
the plurality of filaments comprise silver; and
the matrix comprises MP35N.

8. (Original) The wire strand of claim 7 in which:
the core comprises a 1xN strand, where N = at least 2.

9. (Original) The wire strand of claim 8 in which:
N = 19.

10. (Original) The wire strand of claim 7 in which:
the plurality of filaments comprise 10-35% by weight of the core.

11. (Original) The wire strand of claim 1 in which:
the cladding comprises a material selected from the group consisting of platinum,
iridium, rhodium, palladium and alloys thereof, including a platinum/iridium alloy.

12. (Original) The wire strand of claim 1 in which:
the filaments are braided.

13. (Currently Amended) An implantable cardiac lead for transmitting
electrical signals between an implantable medical device and selected body tissue in
the heart, the lead comprising:

a lead body having a proximal end and a distal end, the proximal end of the lead
body carrying a connector assembly connectable to the implantable medical device; and

at least one cardioverting and/or defibrillating coil electrode on the distal end of the lead body, the at least one cardioverting and/or defibrillating coil electrode being electrically connected to a terminal contact on the connector assembly, the at least one cardioverting and/or defibrillating coil electrode comprising a biocompatible, biostable, corrosion-resistant wire strand comprising (a) a core comprising a plurality of electrically conductive, low electrical resistance filaments embedded in an electrically conductive matrix and (b) a low electrical resistance, substantially chemically inactive cladding enclosing the core, the cladding being discrete from the matrix.

14. (Cancelled)

15. (Currently Amended) The lead of claim 13 ~~in which further comprising:~~
~~the at least one electrode comprises~~ at least one pacing and/or sensing electrode.

16. (Cancelled)

17. (Original) The lead of claim 13 in which:
the core of the wire strand is substantially devoid of interstices.

18. (Currently Amended) A wire strand comprising:
a cladding layer comprising a material selected from the group consisting of platinum, a platinum/iridium alloy, iridium, rhodium and palladium; and
a drawn filled tube core comprising a plurality of filaments embedded in a matrix, each of the plurality of filaments comprising a material selected from the group consisting of silver, gold and a low electrical resistance conductive polymer, and the matrix comprising a material selected from the group consisting of MP35N, tantalum, titanium and niobium, the cladding layer being discrete from the matrix.

19. (New) The lead of claim 13 in which:
the filaments are braided.

20. (New) The wire strand of claim 18 in which:
the plurality of filaments are braided.